

# Atlantic Richfield Company

**Jack Oman**  
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October 10, 2016

## **CERTIFIED – RETURN RECEIPT REQUESTED**

Mr. Dave Seter  
Remedial Project Manager  
U.S. Environmental Protection Agency - Region 9  
75 Hawthorne Street, SFD-9-1  
San Francisco, CA 94105

**Subject: September 2016 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010**

Dear Mr. Seter:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this September 2016 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

## **September 2016 Activities**

### Site Security and O&M Activities

- Continued Site O&M, security and bird deterrent activities. The two security cameras indicated no activity of concern.
- Wind dancers, bird deterrent flags and Wetland Watchers continued to be deployed in accordance with current EPA-approved bird deterrent protocols. To reduce birds from becoming habituated to the presence of wind dancers and flags, these devices were relocated as needed. Bird Guard towers 'A', 'B' and 'C' were not in operation throughout September due to dry Site conditions.
- Continued the EPA-approved bird deterrent schedule with at least three monitoring visits per day at all ponds. Observations were made within half an hour of dawn and dusk.
- PWS Pond water levels: North Cell = 0.0 feet; Middle Cell = 0.0 feet; South Cell = 0.0 feet.
- As of September 30, the Arimetco FMS pond levels were: Phase 1 Pond = 3.08 feet; FMS Evaporation Pond A = 8.43 feet; FMS Evaporation Pond B = 5.66 feet; FMS Evaporation Pond C = 5.41 feet; VLT Pond = 9.77 feet; Slot Pond = 8.34 feet. The freeboard level in FMS Evaporation Pond A on September 30 was approximately 1.73 feet. Fluid transfers in September consisted of 9,275 gallons from the Phase 1 Pond to Pond C, 264,208 gallons from the Slot Pond to Ponds B and C, and 172,642 gallons from the Slot Pond to the VLT Pond (to facilitate performance of the SPS enhanced evaporation pilot study system). SPS continued to operate the enhanced evaporation pilot study system at the VLT Pond, which ended on September 30. See attached monitoring data.
- No rainfall occurred during September and total Site rainfall remained at 3.1 inches since January 1, 2016. See attached monitoring data.

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## **September 2016 Activities - Continued**

### Site Security and O&M Activities - Continued

- Approximately 25,024 gallons of solution were pumped from the leak detectors in September including 1,579 gallons from the VLT ditches and Sediment Pond, and 22,725 gallons from the Slot HLP perimeter collection ditch. See attached monitoring data.
- FMS pond samples for total dissolved solids (TDS) analyses and electrical conductivity (EC) measurements were obtained on September 20 from various depths and locations around the ponds.
- Initiated LEP/UEP dust suppression efforts (spray application of surfactant) on September 28.

### Site Characterization Activities

- Site-wide monthly groundwater elevation measurements were obtained September 20-21 from new monitor wells and wells outfitted with pressure transducers.
- A Pit Lake water elevation of 4,234.84 feet amsl was recorded on August 23 from the pressure transducer, a decrease of 0.13 feet since July 23, 2016. The pit lake elevation has risen approximately 0.84 feet since August 23, 2015.
- A notification was submitted to EPA on September 3 regarding potential safety concerns associated with the sampling of seven monitor wells. A safety review will be conducted, and possible mitigation will be evaluated prior to the resumption of monitoring at these well sites.
- Performed the 3Q 2015 domestic well monitoring event September 13-14.
- Continued the compilation of data for inclusion in the 1Q 2016 Groundwater Monitoring Report (GMR) and the 1Q 2016 Domestic Well Monitoring Report (DWMR). Initiated the compilation of data for the 2Q 2016 GMR and DWMR.
- No changes to the bottled water or domestic well monitoring programs in September.
- Submitted a letter to EPA on September 1 that: 1) documents the extension of Yerington City municipal water service to certain properties previously included in the Domestic Well Monitoring Program and Bottled Water Program; AND 2) requests confirmation that ARC will no longer be required under the Unilateral Administrative Order for Initial Response Activities, Docket No. 9-2005-0011 and the Administrative Order on Consent and Settlement Agreement for Removal Action and Past Response Costs, Docket No. 09-2009-0010 to perform domestic well monitoring or provide bottled water at/to any property that receives City of Yerington municipal water service or is receiving treated domestic water from the Yerington Paiute Tribe public water system.
- Continued the preparation of a technical memorandum describing proposed modifications to the Site-wide groundwater monitoring program.
- Received comments on the Background Groundwater Quality Assessment - Revision 2 (revised BGQA) from EPA via e-mail on September 27, and initiated a review of the comments.
- Continued to compile data resulting from the Wabuska Drain (OU-7) Phase 1 field sampling and analytical activities.
- Removable steel plates were placed over the vadose zone monitoring equipment to protect the sub-grade wiring. Water added to the borehole during installation of the porous cup lysimeters continues to be purged out of 13 of 15 lysimeters. The other two lysimeters have been purged dry of added water. Characterization and vadose zone monitoring locations for the Evaporation Ponds were surveyed on September 22.
- Routine database management in support of Site investigations and monitoring activities.

## **Planned October/November 2016 Activities**

### Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- Continue FMS pond sampling for total dissolved solids (TDS) analyses and electrical conductivity (EC) measurements.
- Complete dust suppression activities on the Evaporation Ponds.
- Initiate the update to FMS water balance model to include the effects of the SPS enhanced evaporation test on the VLT heap leach pad.

## Planned October/November 2016 Activities - continue d

### Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Perform the 4Q 2016 groundwater monitoring event, starting the week of October 3.
- Prepare for and perform the 4Q 2016 domestic well monitoring event in early November.
- Continue the Bottled Water Program. Properties that have received City of Yerington water system connections are gradually being removed from the Program.
- Complete the compilation of data for inclusion in the 1Q 2016 GMR and DWMR, and transmit these reports to EPA. Continue the compilation of data for the 2Q 2016 GMR and DWMR.
- Complete and transmit the Tech Memo describing proposed modifications to the Site-wide groundwater monitoring program. Continue discussions with EPA regarding the proposed reductions to the groundwater and domestic well monitoring programs including analytical parameters, wells to be sampled and the quarterly/annual report contents.
- Continue to review EPA comments on the revised BGQA, and initiate further revisions to the document.
- Continue to compile information for inclusion in the OU-1 RI Report, including an analysis of chemical concentration stability in Site-wide groundwater monitor wells.
- Complete and transmit the Draft Process Areas (OU-3) RI Report.
- Complete and transmit the OU-7 Phase 1 FSAP DSR. Participate in a conference call on October 19 to discuss the field and analytical data.
- Continued the compilation of data for the Evaporation Ponds DSR.

Please contact me at (657) 529-4581 or via e-mail at [jack.oman@bp.com](mailto:jack.oman@bp.com) if you have any questions or comments about this September 2016 monthly report.

Sincerely,



Jack Oman  
Project Manager

Attachment

cc: Harry Ball, EPA – via electronic mail  
Dante Rodriguez, EPA – via electronic mail  
James Collins, EPA – via electronic mail  
Tom Dunkelman, EPA – via electronic mail  
Jeff Collins, NDEP – via electronic mail  
Jeryl Gardner, NDEP – via electronic mail  
Dave Davis, BLM – via electronic mail  
Dan Newell, City of Yerington – via electronic mail  
Phyllis Hunewill – via electronic mail  
Jim Sanford, MVEC – via electronic mail  
Tom Grady, Nevada State Assembly – via electronic mail  
Chairwoman Thom, YPT – via electronic mail  
Ginny Hatch, YPT – via electronic mail  
Deborah Dunn, YPT – via electronic mail  
Dietrick McGinnis, McGinnis and Associates – via electronic mail  
Tom Bowden, Ridolfi, Inc. – via electronic mail  
Chairman Sanchez, WRPT – via electronic mail

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Taurus Massey, Singatse Peak Services, LLP – via electronic mail  
David Peri, Peri and Sons – via electronic mail  
John McMillan, CBI – via electronic mail  
Julian Isham, CBI – via electronic mail  
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